

# Some more routines

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In the Dick Smith VZ200 there are a number of new routines which can be used by the use of simple BASIC commands. These routines are:

1: Defint x (defines variables listed as integers).

2: Defdbl x (defines variables listed as double precision).

3: Auto: (auto line numbers).

4: Print Mem: (prints the memory available).

5: On x GOTO line1, line2, etc.

6: Delete (deletes a block of BASIC program).

All of these routines must be used with a line number, and under most circumstances should be typed before

any other program lines are typed in.

If a program is already in the computer and you want to add one of the above routines then put the line right at the beginning of the program with a GOSUB or GOTO routine in the line where you want the routine to be used. (See example A).

When the routine is put into the computer you must use a line number lower than any existing line number already in the computer.

When you LIST your program you will see the line number only, with nothing after it, so editing this line is not possible. The reason that the line is blank is that in the VZ200 ROM there are no BASIC words for these routines.

Here are the instructions for each routine. Don't type that which is enclosed in ( ).

(DEFINT X) (X can be A,B,C, etc or A-L etc).

10 PRINT A,B

POKE 31469,153

Then type rest of program.

(DEFDBL X)

10 PRINT A,B,C

POKE 31469,155

Then rest of program.

When these variables are found in your program they will automatically be used as integers or double precision as programmed.)

(AUTO) (to generate AUTO line numbers 10-20-30-40, etc).

1 PRINT

POKE 31469,183

RUN

(To generate AUTO line numbers starting at, say, 500 with steps of 20).

1 PRINT 500,20

POKE 31469,183

RUN

(The first number is the start number, the second is the step between numbers).

When AUTO is finished with remove line 1.

(PRINT MEM)

10 PRINT X

POKE 31470,200

RUN

(Also see example A.)

(ON X GOTO : (OR GOSUB)  
100,200,300)

10 POKE 31469,161

(For use see example B.)

(DELETE)

(After a program has been loaded and is working you sometimes need to remove a block of program that is no longer needed or needs to be replaced.)

1 PRINT 150-300

POKE 31469,182

RUN

(In this example lines 150 to 300 will be deleted.)

Example A

When the routine is required in the middle of a program use as this example.

2 PRINT X:RETURN

POKE 31470,200

1 GOTO 10

10 (rest of program)

When memory available is required in the program use: Line no GOSUB 2.

Example B

In the ON X GOTO routine, when X = 1 the program will branch to the first line No., and if X = 2 then the program will branch to the second line No., etc. Here is how it can be used.

70 PRINT X GOTO 100,200,300,400

POKE 31469,161

10 INPUT "ENTER TWO NUMBERS",a,b

20 PRINT "ENTER 1 TO ADD"

30 PRINT " 2 TO SUBTRACT"

40 PRINT " 3 TO MULTIPLY"

50 PRINT " 4 TO DIVIDE"

60 INPUT X

80 (continue with rest of program)

Other words decide where this line is to be, give it the correct line number. But type it in first followed immediately by its POKE statement. You could also use it as example A. You could do it this way:

Type IN PROGRAM B, replace line 70 with GOTO 2 and then add:

2 PRINT X GOTO 100,200,300,400

POKE 31469,161

1 GOTO 10

If two or more of these routines are required type as below:

5 PRINT A,B,C

POKE 31469,153

4 PRINT X,Y,Z

POKE 31469,155

This will make A,B,C variables integers and X,Y,Z variables double precision. These lines can be typed in after the program is loaded as long as line numbers lower than five have not been used.